# Kemper County Health Profile



State of Mississippi Mississippi State Department of Health Office of Science

2003

# Mississippi State Department of Health Office of Science

Brian W. Amy, M.D., M.H.A., M.P.H. State Health Officer

> Peter J. Fos, Ph.D, M.P.H. Chief Science Officer

Claudia Dvorak, M.L.S., M.B.A.
Mississippi State Department of Health
Office of Science
(601)576-8046
570 E. Woodrow Wilson
Jackson, MS 39215



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## Introduction

The Mississippi State Department of Health's mission is to promote and protect the health of the citizens of Mississippi. The Mississippi State Department of Health strives for excellence in government, cultural competence in the carrying out of our mission, and to seek local solutions to local problems.

This report is intended to be a general overview of health status for a specific County. Since health status and health needs vary by sex, age, and race, we are starting with a population snapshot of the County to show how it compares with the State as a whole.

Throughout this Profile, each chart is clearly labeled regarding health factors which were measured for that chart. Data was utilized from statistical reports from the Mississippi State Department of Health, the Mississippi Data Center, and the U.S. Census.

For most charts, we provide a basis for comparison. Sometimes it is how a health measure has changed over time, sometimes it is a comparison of the County to the State, or to the Nation.

The most difficult aspect of preparing this Profile was trying to address racial and ethnic sensitivities. Our largest minority group is that commonly referred to as "Black" or "African American." In the reports which have been collected by Vital Statistics for years, the traditional nomenclature was "Non-White" and we have followed that tradition in our labels.

For most of the health indices reported in this County Profile, Non-White rates are considerably worse than White rates. This same trend is seen across Mississippi and the United States. We believe that this reflects lower average levels of personal income and educational attainment in the Non-White community, as compared to the White community.

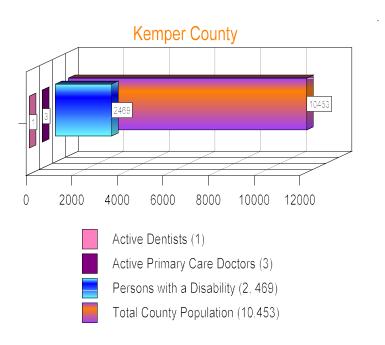
Until the social and economic inequities between Whites and Blacks can be addressed, many of the gaps between Whites and Non-Whites in illness and death rates can be substantially reduced through the provision of public health, medical, and social services.

The Office of Science County Health Profiles are available on the web at: <a href="http://www.msdh.state.ms.us.">http://www.msdh.state.ms.us.</a>

## County Demographic Distribution

The availability and accessibility of health care services is essential to meet the needs of the state's population. Sixty-four of Mississippi's 82 counties are designated as health professional shortage areas, including Kemper County<sup>1</sup>. This is based on the desired ratio of one primary care provider for 3500 population.

**Kemper County Total Population = 10,453 Projected Population 2005 = 11,344**<sup>2</sup>



<sup>&</sup>lt;sup>1</sup>The US Dept. of Health and Human Services defines a health professional shortage area as a geographic area encompassing 30 minutes travel time and containing at least 3,500 persons per primary care physician. MS State Health Plan FY2003, p. V-2.

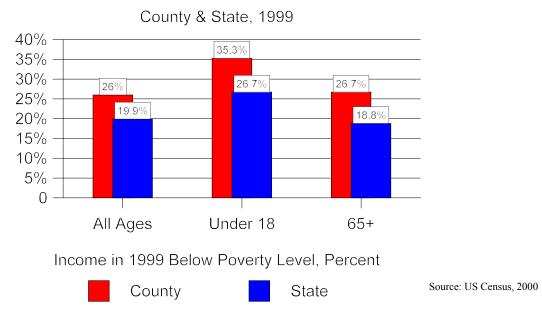
<sup>&</sup>lt;sup>2</sup>US Census 2000 and MS Population Projections, Center for Policy Research and Planning, MS Institutions of Higher Learning, Sept. 1998.

In FY2002, Kemper County had 3 Primary Care Physicians and 1 dentist3.

## **Income and Poverty**

In Mississippi as a whole, 19.9% of the population, of all ages, had income in 1999 below poverty level, while 26.7% of related children under 18 were determined to have poverty status. In Kemper County, 26.0% of the population, of all ages, had income in 1999 below poverty level, while 35.3% of related children under the age of 18 were determined to have poverty status. Of those over the age of 65, 26.7% had income below poverty level.

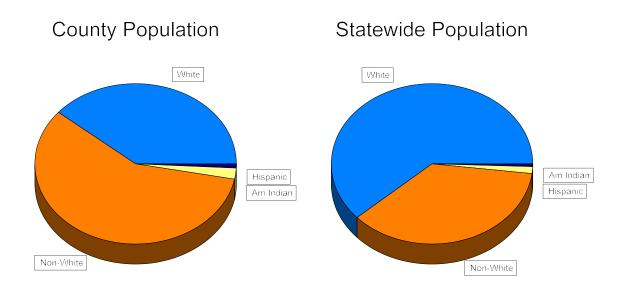




Kemper County has a higher percentage of population in poverty than the percentage Statewide, for all ages and for related children under the age of 18.

<sup>&</sup>lt;sup>3</sup>MSDH State Health Plan FY2003.

#### Racial Distribution

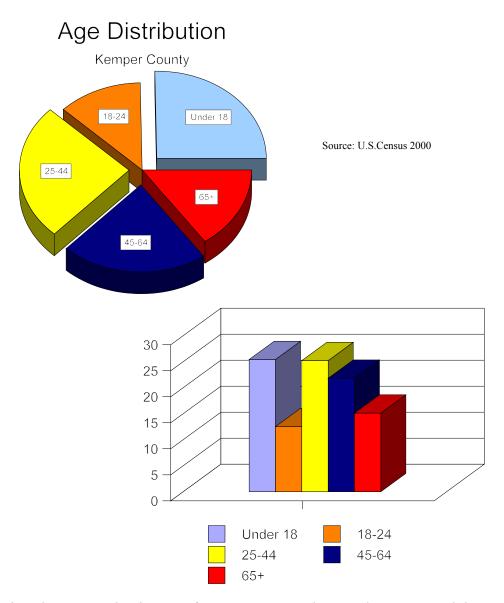


U.S. Census, 2001

#### Kemper County has a Non-White population of 58.1%, compared to the State's 36.3%.

Kemper County has an American Indian population of 2.1%, compared to the State's 0.4%. The County's Hispanic population is 0.7%, compared to the State's 1.4%.

Kemper County has <u>fewer Whites and Hispanics</u>, but <u>more Non-Whites and American Indians</u> than Statewide percentages.



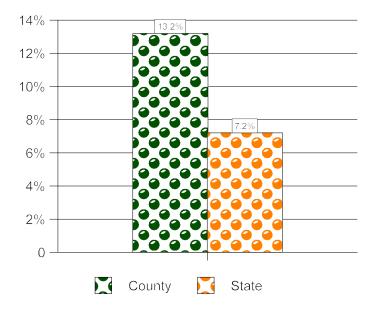
County population shows a predominance of two age groups, those under age 18 and those aged 25 - 44. The County has 15.1% persons over the age of 65, compared to the State's 12.1%.

Kemper County has a <u>higher percentage of persons over the age of 65</u> than the Statewide percentage.

#### Workforce

As of 2000, Kemper County had 4,417 persons in the civilian labor force. Of those, 6.8% were unemployed and looking for work. Statewide in 2000, 4.3% of the workforce was unemployed.

#### County and State Unemployed, July 2003



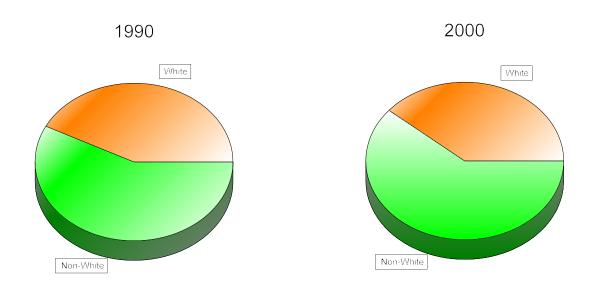
County residents who are employed will typically have improved opportunities to access health care through employer-supported health plans. Those residents who are not employed will have greater needs for Public Health services.

Kemper County had a higher percent of unemployment than Statewide in July 2003.

Source: U.S. Census 2000

## County Racial Change, 1990 - 2000

The total County population changed little in the decade of 1990 - 2000. The White population declined slightly, from 4,407 to 4,080, and the Non-White population grew slightly, from 5,949 to 6,076. The percent change was -7.4% White, +7.1% Non-White.



Source: Vital Statistics Mississippi 2000

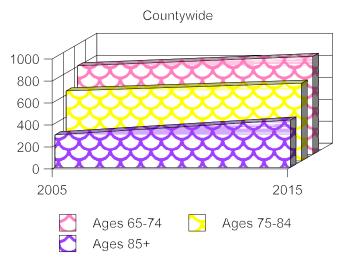
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Kemper County White population declined and Non-White population increased in the last ten years, while total County population remained constant.

# Projections for Population Over 64 Years of Age

As people get older, their risk for disease and debilitating chronic conditions increase, as well as their need for more medical care. This trend becomes noticeable at about age 65 and directly increases with age.

#### Aged Population Growth



Source: Center for Policy Research & Planning, Mississippi Institutions of Higher Learning

The number of Kemper County population over age 65 will continue to grow.

#### County Nursing Home Beds, Projection (2005)

There are 81 licensed nursing home beds in Kemper County. The projected need for 2005 is for 87 beds. The need for nursing home care beds is established at:

0.5 beds per 1,000 population aged 64 and under

14 beds per 1,000 population aged 65-74

59 beds per 1,000 population aged 75-84

179 beds per 1,000 population aged 85 and older

Source: MSDH State Health Plan 2003

The MSDH uses population projections prepared by the Center for Policy Research and Planning of the Institutions of Higher Learning to calculate bed need.

#### Nursing Home Bed Need



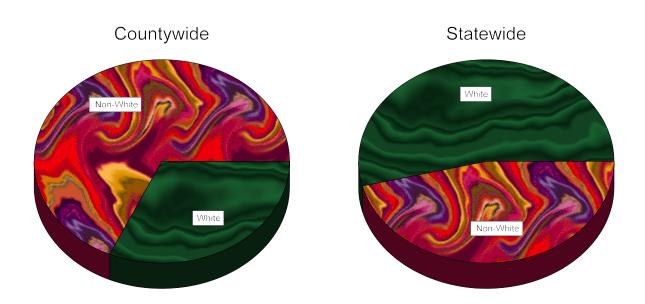
Source: Mississippi State Health Plan, 2003

In both Whites and Non-Whites, a significant increase in the number of people 80 years of age and older is projected. This expectation indicates a greater need for elderly health care services, including nursing home facilities, in Kemper County by the year 2015. **Kemper County will need additional nursing home beds as the population ages.** 

# Maternal and Child Health Indicators Pregnancy, Infancy and Infant Mortality

Pregnancy and infancy are periods of rapid growth and development, and high vulnerability. This is the period when a small investment in preventive services can pay the greatest dividends concerning preventing illness, disability and premature death. For these reasons, infant mortality has become the measure used to compare states and nations in terms of the quality of life and access to the most basic of health-related services.

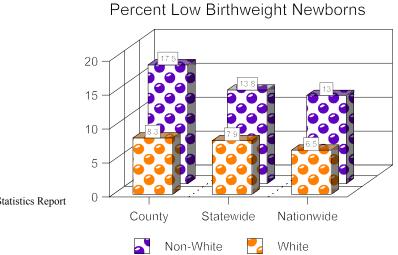
#### Live Births By Race, 2001



The rate of live births per 1,000 population for the County was 10.5 White, 14.6 Non-White, compared to the State rate of 13.0 White and 17.7 Non-White.

### Percent Low Birthweight Newborns

A low birthweight baby is one that weighs less than five and a half pounds (2,500 grams) at birth. These babies have more illnesses and higher death rates. Low birthweight can be due to teenage mothers, poor nutritional status of the mother, prematurity, maternal or infant illness, maternal exposure to tobacco smoke, alcohol, drugs, or other causes. Adolescents, women over 35, women with pregnancies spaced too close together, and those that do not receive adequate prenatal care are all at high risk of having a low birthweight infant.

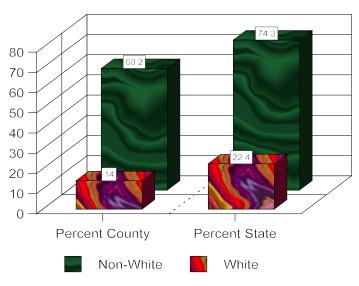


CDC National Vital Statistics Report 2002 and MSDH

The risk of dying during the first year of life for low-birthweight newborns is 24 times that of normal birthweight newborns. The high rate among African Americans of low-birthweight babies has been explained by factors such as geographic isolation (people who are unable to access support services easily) and lack of health insurance.

In Kemper County, the percent of low birthweight newborns is higher than State and Nation percentages.

# Births to Unmarried Mothers Percent of Total Live Births, 2001



Vital Statistics Mississippi 2001

In Kemper County, over 60% of all Non-White births, and 14% of all White births, are to unmarried mothers. Statewide percentages are higher for both White and Non-White, at 22.4% for White and 74.3% for Non-White.

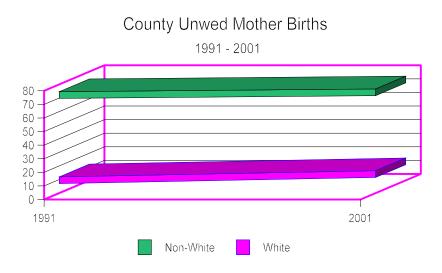
Children of unmarried mothers are substantially less likely to graduate from high school than the children of married mothers, regardless of the mother's age at the time of birth<sup>4</sup>. Children who grow up with married parents generally enjoy a higher standard of living than those living in single-parent households.<sup>5</sup>

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<sup>&</sup>lt;sup>4</sup>Out of Wedlock: Causes and Consequences of Nonmarital Fertility, ed. Lawrence L. Wu and Barbara Wolfe [New York: Russell Sage Foundation, 2001], pp. 287-316.

<sup>&</sup>lt;sup>5</sup>Marriage, Poverty, and Public Policy: A Discussion Paper from the Council on Contemporary Families. Prepared for the Fifth Annual CCF Conference, April 26, 2002. Stephanie Coontz and Nancy Folbre.

#### Percent Change, 1991 - 2001 Unmarried Mother Live Births



Percent of Total Live Births

Out-of-wedlock childbearing has risen dramatically nationwide, from 5.3% of all births in 1960 to 33% of all births in 1999. The percent of births to unmarried mothers in Mississippi statewide is 22.4% among Whites and 74.3% among Non-Whites.

The percentage of babies born to unmarried mothers in Kemper County increased for Whites from 9.5% in 1991 to 14% in 2001. However, the percentage of Non-White births to unmarried mothers decreased slightly in the same period, from 62.7% to 60.2%.

In Kemper County, 14% of White births, and 60.2% of Non-White births, were to unmarried mothers in 2001.

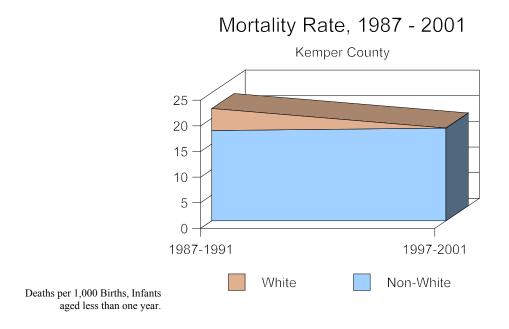
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<sup>&</sup>lt;sup>6</sup>National Center for Health Statistics, *National Vital Statistics Reports*, vol. 48, no.16, Oct. 18, 2000.

### **Infant Mortality**

Infant mortality reflects deaths in the first year of life, and is measured using the infant mortality rate. Infant mortality rate is measured as the proportion of deaths in the first year of life in every 1,000 live births.

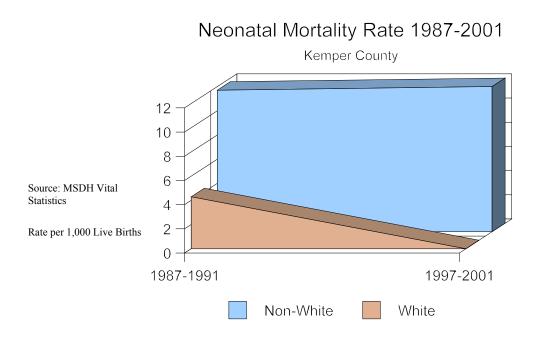
Poor maternal health and poor nutrition all increase the risk of infant death. Chemical toxins such as alcohol, drugs and tobacco smoke also increase the risk. After the first month of life, poor infant nutrition, poor hygiene and infectious diseases all increase risk.



Since 1987, infant mortality has fallen in the County.

## **Neonatal Mortality**

Neonatal mortality represents infant deaths in the first 28 days of life. Deaths during this time are generally due to causes affecting the mother before and during pregnancy. Neonatal mortality rate is measured as the proportion of deaths in the first 28 days of life in every 1,000 live births.

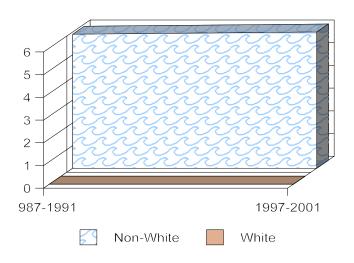


The County Neonatal death rate has fallen for Whites and has increased slightly for Non-Whites.

### Postneonatal Mortality

Postneonatal Mortality is measured as the proportion of deaths among infants aged 28 days to one year in every 1,000 live births. The Postneonatal mortality rate is an important measure of health, because nearly half of these deaths are caused by preventable causes such as SIDS, infections, and injuries. With education and health care interventions, postneonatal mortality rates can be reduced and the racial gap in these deaths can be narrowed.

#### Postneonatal Mortality Rate, Kemper County 1987 - 2001



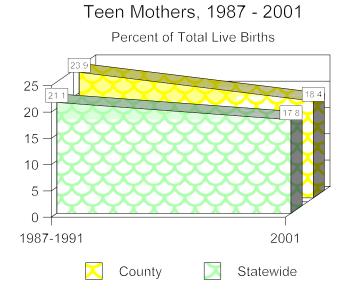
Source: MSDH Vital Statistics Rate per 1,000 Live Births

Since 1987, Postneonatal Mortality rates per 1,000 births in the County have remained constant in Non-Whites (5.9 postneonatal deaths per 1,000 live births in 1987 and 6.0 postneonatal deaths per 1,000 live births in 2001). Among Whites, postneonatal deaths have remained at zero.

#### Births to Teenage Mothers 1987 - 2001

**Mississippi has the highest rate in the nation of births to teens.** Teen mothers are more likely to drop out of school, require long-term financial support, and be involved in child abuse. Unplanned pregnancies account for a majority of the births among women with family incomes below the poverty level.

Source: MSDH Strategic Plan 2003 - 2007



MSDH Vital Statistics 2001

Kemper County teenage motherhood percentages have been, and remain, higher than Statewide.

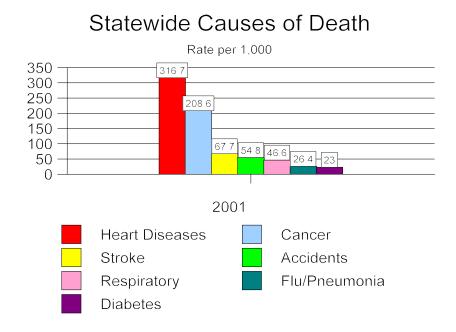
#### Illness and Death

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Many premature deaths can be prevented, allowing the person to have more productive years of life. The majority of deaths result from heart disease, cancer, stroke and injury.

By looking at the numbers of deaths, the age, sex and race adjusted rates, and the years of potential life lost by premature deaths, much can be learned about the health of a community. Deaths during childhood, adolescence and young adulthood especially reflect community health.

This section of the County Health Profile addresses those causes of death that are most common and most preventable.

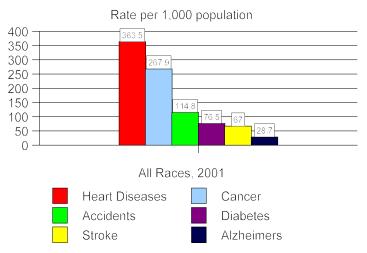


Statewide, the leading causes of death are heart disease, cancer, stroke and accidents.

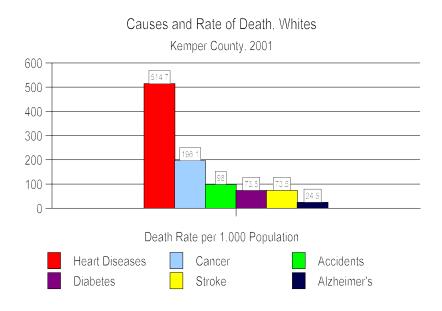
### Causes of Death, All Races

In Kemper County, as in the State, the two leading causes of death are **heart disease** and **cancer**. There is a lower rate of death from stroke in the County when compared to the State as a whole. However, there is a **higher rate of death in the County from accidents, diabetes, and Alzheimer's Disease**.

#### Causes of Death, Kemper County



In Kemper County, the leading cause of death is from Heart Disease.

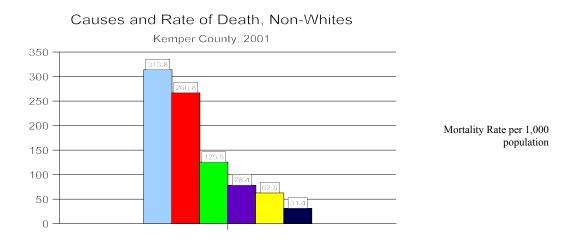


Smoking is the single most important modifiable risk factor for cardiovascular disease and coronary heart disease. Approximately 24% of adult Mississippians are smokers. Although this percentage has decreased since the 1940's when 50-60% of all adults smoked, there have not been decreases in the percentage of current smokers in Mississippi since 1990<sup>7</sup>.

In Kemper County, the highest rate of death for Whites is from cardiovascular disease.

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<sup>&</sup>lt;sup>7</sup>Penman AD, Johnson D. The 2000 Mississippi State of the Heart Report. Mississippi State Department of Health, Office of Community Health Services and Bureau of Public Health Statistics, and the American Heart Association, Southeast Affiliate, March 2000.



**In Kemper County the highest rate of death for Non-Whites in 2001 was from Cancer.** For reasons that are not understood, black Americans have about a 33% higher death rate for all cancers than white Americans, according to the American Cancer Society.<sup>8</sup>

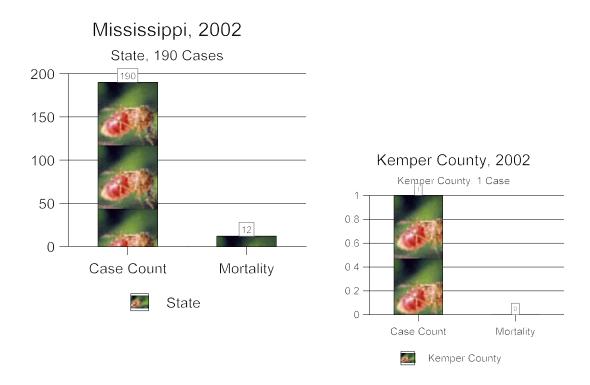
In Kemper County, the highest mortality rate among Whites was from heart disease. Among Non-Whites the highest mortality rate was from cancer.

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<sup>&</sup>lt;sup>8</sup>Cancer Facts & Figures 2002, American Cancer Society, 2002.

## West Nile Virus

West Nile virus is spread by the bite of an infected mosquito, and can infect people, horses, and many types of birds. Most people who become infected with West Nile Virus will have either no symptoms or only mild ones. However, West Nile Virus infection can result in severe and sometimes fatal illnesses.



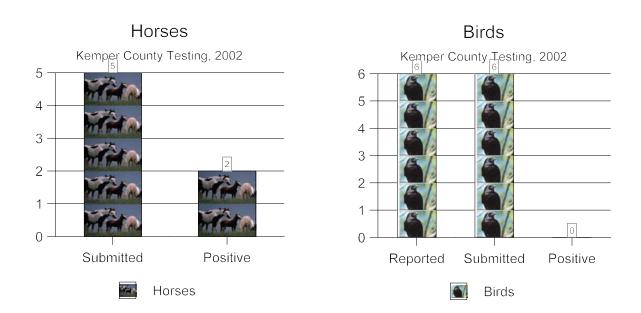
In Mississippi in 2002, there were 12 human deaths from West Nile Virus, and 190 human cases in the state as a whole.

In Kemper County, there was one human case and no human mortality from West Nile Virus in 2002.

## West Nile Virus Kemper County, 2002

Since the original 1999 outbreak in New York City, the finding of dead birds that test positive for West Nile Virus has always been a precursor to human cases of the virus. Testing dead birds is the best early detection method for the presence of the virus in the area.

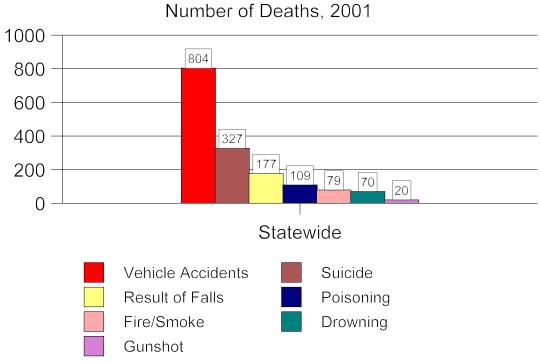
Approximately 40% of equine West Nile Virus cases result in the death of the horse. Horses most likely become infected in the same way humans become infected, by the bite of infectious mosquitoes.



In Kemper County in 2002, there were 5 horses submitted for testing; of those, 2 tested positive for West Nile Virus. There were 6 reports of dead birds in 2002 in Kemper County. Of those, all 6 birds were tested and none were positive.

# Injuries

# Statewide Mortality by Cause, 2001



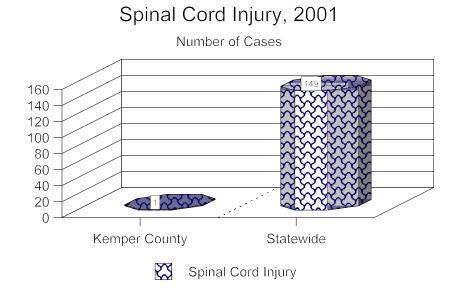
Both the County and the State suffer the highest rate of accidental death from vehicular accidents. Other causes include suicide, death as a result of falls, poisoning, and deaths related to fire, smoke, or flames.

In 2001 in Kemper County, there were four accidental deaths, all from vehicular accidents.

# **Spinal Cord Injuries**

#### Statewide and Countywide, 2001

Spinal Cord Injuries have a profound effect on the future of Mississippians, since they often remove an individual from study and work during their most productive ages. These injuries cause many people to need state support for the remainder of their lives.



The leading causes of spinal cord injury vary by age. Among persons under age 65, motor vehicle crashes are the leading cause. Among persons over 65, most spinal cord injuries are caused by falls.

In 2001, Kemper County had one spinal cord injury. Throughout the State, 149 people sustained spinal cord injuries.

### **Injury Prevention**

Injuries are the single greatest cause of mortality in Mississippi for persons between the ages of 1 and 44. Mississippi's mortality rate from injuries is the second highest in the nation. The Injury Prevention Program manages activities aimed at reducing injuries by coordinating the MSDH child safety seat program and other injury prevention efforts including bicycle safety projects and fire prevention projects.

In 2002, a total of 3,530 child safety seats were purchased by the MSDH and distributed statewide. Child passenger safety packets were distributed along with the car seats.



In Public Health District VI, which includes Kemper County, 260 car seats were purchased and distributed in 2002.

#### School Health Nurses for a Tobacco-Free Mississippi

The School Health Nurses for a Tobacco-Free Mississippi program places school nurses into Mississippi's public school system whose major job function, other than their normal day-to-day nursing duties, is to teach Mississippi school age children the dangers of tobacco use.

During the 2000 - 2001 school year, nurses in the tobacco program conducted activities aimed at reducing or preventing youth tobacco use for 44,250 students in Mississippi.



Currently, the Partnership for a Healthy Mississippi funds 51 school districts across the state with the tobacco prevention program. Additional school districts will only be added if funding is increased. **Kemper County does not currently have a Tobacco School Nurse program.** 

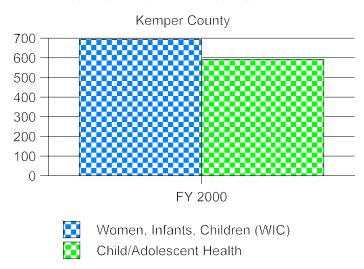
Students exposed to the School Nurses for a Tobacco-Free Mississippi program were significantly more likely to know tobacco can hurt and kill; that cigarettes contain drugs; that tobacco causes cancer and heart disease; and that second-hand smoke is dangerous<sup>9</sup>.

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<sup>&</sup>lt;sup>9</sup>Mississippi Youth Tobacco Survey 2000, MSDH.

# Public Health Services to the County Patients Served by MSDH

#### Number of Patients Served



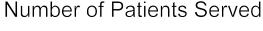
The Supplemental Food Program for Women, Infants, and Children (WIC) provides health screening, certification, and nutrition education to pregnant, breast-feeding, and postpartum women, infants, and children who qualify. Monthly food packages are distributed directly to participants through 93 distribution centers located in every county in the state.

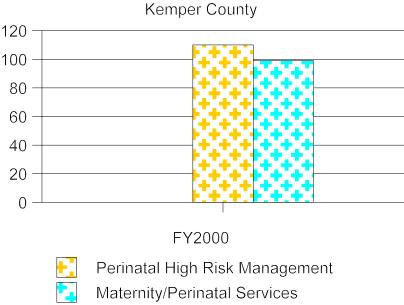
The Child and Adolescent Health Program provides childhood immunizations, well child assessments, limited sick child care, and tracking of high-risk children. Services are provided via a multidisciplinary team including medical, nursing, nutrition, and social work.

In Kemper County in 2000, 695 people were served by the WIC program and 592 patients were served by the Child/Adolescent Health program.

## Public Health Services to the County

Patients Served by MSDH

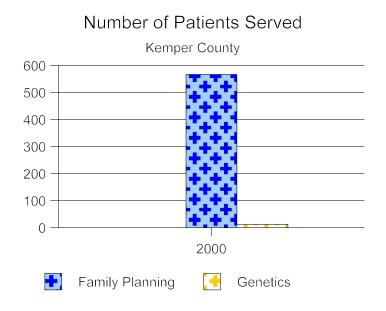




The Department of Health provides maternity services statewide to more than 12,400 women through County Health Departments, targeting low-income pregnant women. The Perinatal High Risk Management/Infant Services System program is designed to reduce low birth weight and infant mortality through a multidisciplinary, family-oriented, risk reduction program that provides an array of supplemental services including nutrition and counseling.

In 2000, 99 maternity patients and 110 perinatal high risk management patients were served by the MSDH in Kemper County.

#### Public Health Services to the County



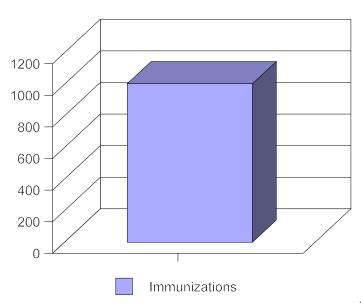
Mississippi leads the nation in births to teens. **The Family Planning Program** seeks to provide access to services for teenagers at risk and low-income women, by providing counseling, medical examinations, education, and contraceptives to allow individuals to prevent unplanned pregnancies and to space children.

**The Genetics Program** provides screening, diagnosis, counseling, and follow-up for a range of genetic disorders and has developed comprehensive genetic services statewide. The Genetics Program also collects data for the birth defects registry.

In Kemper County, the Genetics program provided service to 13 patients. The Family Planning Program provided service to 567 patients.

# Public Health Services to the County Immunization

Number of Patients Served, 2000



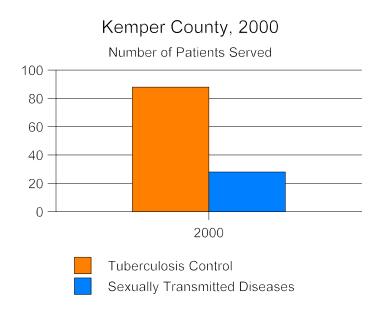
Vaccines are among the

safest and most effective measures for the prevention of infectious and communicable diseases. The Division of Immunization provides services designed to limit illness and death due to childhood vaccine-preventable diseases such as diphtheria, tetanus, pertussis, polio, measles, mumps, rubella, influenza-type b, hepatitis A, hepatitis B, and chickenpox.

The Division administers vaccines, monitors immunization levels, provides disease surveillance and outbreak control, information and education, and enforcement of immunization laws.

In 2000, Immunization served 1003 patients in Kemper County.

#### Public Health Services to the County



There were 154 new cases of tuberculosis (TB) reported in Mississippi during 2001. The TB program provides early detection of persons with or at risk of developing TB; treatment and follow-up of diagnosed cases; preventive therapy; and technical assistance to public and private agencies and institutions, such as hospitals, nursing homes, and mental institutions.

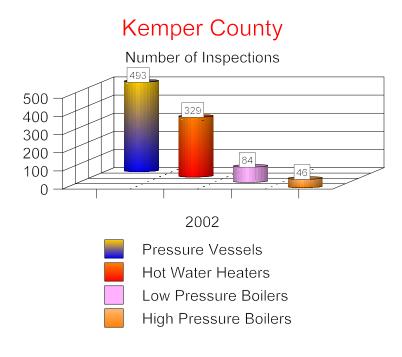
Sexually Transmitted Diseases (STDs) are infections spread from one person to another person during sexual contact. The goal of the STD control program is the reduction and practical management of STD in Mississippi.

During the year 2000, the Tuberculosis program served 88 persons in Kemper County, and the STD program served 28 persons in the County.

## **Boiler and Pressure Vessel Safety**

Citizens and their properties, both public and private, are endangered by unsafe boiler and pressure vessels. Explosions have caused fatalities and considerable property damage. Tanks storing compressed air are the objects most frequently involved in such explosions.

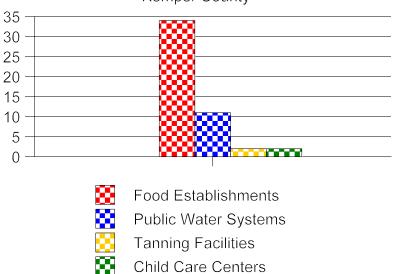
The Boiler and Pressure Vessel Safety Branch conducts inspections and certifies the use of all boilers and pressure vessels covered by law. Violations were found in state-owned buildings, schools, hospitals, nursing homes and small businesses. All funding for this program is generated from inspection and certificate fees.



In 2002, the Boiler and Pressure Vessel Safety Program inspected boilers, vessels and heaters in Kemper County on either an annual or biennial basis.

#### **Environmental Health Services**





Health Protection for the people of Mississippi is one of the chief responsibilities of the Mississippi State Department of Health. From the quality of our food and water, to child care and professional licensing, our concerns embrace every aspect of life across the state. Our goal is to achieve and maintain the highest standard of health for all Mississippians.

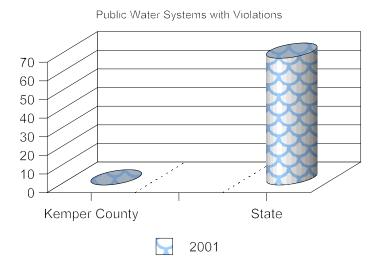
In 2000, 34 Food Establishments, 11 Public Water Systems, 2 Tanning Facilities and 2 Child Care Centers in Kemper County were inspected by the Department of Health.

### **Public Water Supply**

Public water supplies provide drinking water to 96% of the state's citizens. Most are small, rural systems that are financially unable to employ full-time waterworks operators. This results in poorly operated and managed public water supplies that are highly susceptible to contamination.

The Public Water Supply Program monitors drinking water quality, follows-up and resolves water quality violations and works toward the goal of ensuring public water supplies comply with all Safe Drinking Water Act water quality standards.

#### Maximum Contaminant Level



The Environmental Protection Agency sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels. During 2001, 68 Public Water Supplies incurred Maximum Contaminant Level violations statewide.

No public water supplies in Kemper County incurred violations in 2001.